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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/604,468	06/27/2000	Edward J. Thomas	LD 11108	5100

7590

03/25/2002

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EXAMINER

TRUONG, BAO Q

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 03/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 09/604,468	Applicant(s) THOMAS ET AL.	
	Examiner Bao Q. Truong	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment on 13 December 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 5) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: the reference number "82" on page 7 line 21 and the reference number "84" on page 7 line 23. Correction is required.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "rheostat having continuous variable control" in claim 6 and the "a second plurality of LEDs" in claim 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show:
 - "A switch 44, coupled to a variable resistor 46," as described on page 6 line 3, and
 - "the variable resistor 46 is designed to selectively short-circuit predetermined sections of the resistor" as described on page 6 lines 27-28.
 - "the optical assembly are one or more reflectors and one or more lenses" as described on page 5 lines 24-25.
 - "the optical assembly 40 is adapted to move or rotate so that the focus of the lens and the dispersion of the LED beam can be adjusted as designed" as described on page 5 lines 25-27.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 15 is objected to because of the following informalities: there is lack antecedent basis for "said plurality of devices" on line 5. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11, 12 and 15-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11, the applicant has not clearly described how the optical assembly being selectively adjustable for focusing and dispersing the LED beam.

Claim 12, the applicant has not clearly described how the light source being selectively moveable for focusing and dispersing the LED beam.

Claim 15, the applicant has not clearly described how the first plurality of LEDs uses the battery source upon the failure of AC power since there are no detective device or sensor being disclosed to detect the failure of the AC power source and to change a circuit to use the battery source.

Claims 16-28 are necessary included because they are dependent on claim 15.

Claim 29, the applicant has not clearly described what is the "phosphor devices" on lines 3 and 4.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 8-10, 13-15, 22-24 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackman [US 5,548,494] in view of Hed [US 5,301,090].

Regarding claims 1, 15 and 29, Blackman discloses a lighting fixture [200] for mounting under a cabinet having a housing [202], a fluorescent light fixture [380], a night light [350], a flashlight [300], a translucent diffuser cover [402] as an optical assembly and mounting openings [205a, 205b] for mounting of housing [202] to a cabinet (figures 10-13, column 5, lines 54-67 and column 6, lines 1-5). Blackman discloses everything except for: the plurality of LEDs.

Hed shows the use of plurality of LEDs in a left column of the figure 1 (figures 1 and 1A, column 4, lines 54-68 and column 6, lines 8-11).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the LEDs of Hed in the fluorescent light fixture, the night light and the flashlight of Blackman in order to provide a longer lifetime of a light source.

Regarding claims 8 and 22, Hed discloses a plurality of LEDs having red, blue and green colors (figures 1 and 1A, column 4, lines 64-67).

Regarding claims 9 and 23, Blackman discloses a battery [312] (figures 11-12, column 7, line 12).

Regarding claims 10 and 24, Blackman discloses a batteries [312] and a power interruption detector circuit [324] to turn automatically a flashlight light assembly [300] on while a fluorescent light fixture [380] is off when a power failure occurs (figures 11-12, column 7, lines 13-18 and column 8, lines 45-55).

Regarding claims 13 and 27, Blackman discloses a flashlight light assembly [300] as a second separately and distinct light source. Blackman discloses everything except for: the plurality of LEDs.

Hed shows the use of plurality of LEDs in a middle column of the figure 1 (figures 1 and 1A, column 4, lines 54-68 and column 6, lines 8-11 and lines 54-68).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the LEDs in the middle column of the figure 1 of Hed in the flashlight light assembly of Blackman in order to provide a longer lifetime of a light source.

Regarding claims 14 and 28, Hed shows the use of flexible materials (column 8, lines 4-12).

9. Claims 2-7 and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackman in view of Hed and Hipp [US 5,998,928].

Blackman and Hed were discusses in the rejection claims 1 and 15 above.

Regarding claims 2 and 16, Blackman and Hed were disclosed everything except for: the variable resistor for controlling the level of optical output.

Hipp shows the use of a rheostat [16] as variable resistor of light intensity control system [10] (abstract, figure 1, column 2, lines 45-46).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the rheostat of Hipp in the circuitry system of Blackman in order to provide a control of electric current.

Regarding claims 3 and 17, Blackman discloses a manual On/Off switch [398] (figures 11-12, column 7, lines 51). Blackman discloses everything except for: the switch being turn on and off any select number of LEDs.

Hed shows the use of controller [52] as a switch, which controls the power to each group of LEDs (figure 3, column 9, lines 65-68).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the controller of Hed in the switch of Blackman in order to provide a variable electrical current.

Regarding claims 4 and 18, Blackman discloses a manual On/Off switch [398] (figures 11-12, column 7, lines 51). Blackman discloses everything except for: the switch providing a variable control having two distinct levels of illumination.

Hed shows the use of controller [52] as a switch, which controls the relative intensities of the light sources (figure 3, column 9, lines 57-59).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the controller of Hed in the switch of Blackman in order to provide a variable chromaticity luminary.

Regarding claims 5 and 19, Blackman discloses a photocell sensor [358] to turn On/Off a night light assembly [350] (figures 10-13, column 7, lines 26-39 and column 8, lines 64-68).

Regarding claims 6, 7, 20 and 21, Hipp discloses a variable control by a rheostat [16] (figure 1, column 2, lines 45-60).

10. Claims 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackman in view of Hed and Splane [US 5,791,768].

Blackman and Hed were discussed in the rejection claims 1 and 15 above. Blackman and Hed were disclosed everything except for: the optical assembly being selectively adjustable.

Splane shows the use of an adjusting assembly of an inner reflector and an outer reflector relative to a gaseous discharge lamp (abstract, figure 2).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the adjusting assembly of reflectors of Splane in the fluorescent light fixture and the night light of Blackman in order to provide an advantageous adjustment of focusing.

11. Claims 12 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackman in view of Hed and Gordin [US 5,887,969].

Blackman and Hed were discusses in the rejection claims 1, 15 and 25 above. Blackman and Hed were disclosed everything except for: the light source being selectively moveable.

Gordin shows the use of a light source [28] being moveable relative to reflector [26] (figures 9-10, column 6, lines 27-39 and column 10, lines 20-32).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the moveable light source assembly of Gordin in the fluorescent light fixture and the night light of Blackman in order to provide an advantageous adjustment of focusing.

Response to Arguments

5. Applicant's arguments filed on December 13 2000¹ have been fully considered but they are not persuasive.

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Drawing objections:

The reply filed on December 13 2001 is not fully responsive to the prior Office Action on 13 September 2001 because of the following omission(s) or matter(s): the objection of the reference number "82" on page 7 line 21 and the reference number "84" on page 7 line 23.

The applicant recites "*Applicant respectfully submits that no drawing showing a rheostat having continuous variable control, a second plurality of LEDs nor a switch coupled to a variable resistor is necessary for an understanding of the subject matter sought to be patented*" and "*a drawing is not necessary in order to understand the claimed invention*". The examiner kindly reminds the applicant that any limitations and structural details that are in the claim(s) should be shown in the drawing. See MPEP § 608.02(d).

The following is the reason why the applicant must submit the drawing of the rheostat having continuous variable control and a switch coupled to a variable resistor.

The applicant claims in the claim 2 "**...further comprising a switch coupled to a variable resistor for controlling the level of optical output**"; Later on, the applicant claims the switch of claim 2 in the claim 6 "**the switch operates as a rheostat having continuous variable control**". With two claims 4 and 6, the applicant claims the whole scope invention of Hipp [US 5,998,928], the lighting intensity control system, which discloses how a circuit can be built, what element is needed to accomplish the task of controlling the light intensity.

The following is the reason why the applicant must submit the drawing of the second plurality of LEDs distinct from the first plurality of LEDs.

The applicant claims the claim 13”...**further comprising a second plurality of LEDs for providing lower levels of illumination,...adapted to automatically turn on upon primary power failure** “. It is required to show the second plurality of LEDs in the undercabinet lighting assembly. Where is the second plurality of LEDs located? How is the second plurality provided many lower levels of illumination? How is the second plurality of LEDs obtained the characteristic “automatically”? And how is the second plurality of LEDs detected the failure of electrical power?

35 USC § 112 rejections:

The applicant recited that claims 11 and 12 do in fact particular point out and distinctly claim the subject matter; and the applicant points to the claimed features described on page 5 lines 22-29.

The drawing of the “optical assembly **40**” is requested under drawing section above.

On the specification page 5 lines 24-25, “*the optical assembly are one or more reflectors and one or more lenses*” and “*the optical assembly **40** is adapted to move or rotate so that the focus of the lens and the dispersion of the LED beam can be adjusted as designed*”.

The applicant has not described how the optical assembly can be adjusted to obtain the LED beam design. The applicant has not described which lens or reflector being moved or rotated. The applicant has not described what kind of lens or what

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shape of reflector to be used. The applicant has not described how a structure could be established in order to have the optical assembly with all functions focus and dispersion.

35 USC § 103 Art Rejections

Claims 1, 8-10 and 13-14, the applicant recites "*claim 1 of the presently claimed subject matter of specifically calls for an under cabinet lighting assembly that comprises a housing, a first plurality of LED, an optical assembly, and a fixing apparatus disposed on a surface of the housing*".

Blackman discloses a lighting fixture [200] for mounting under a cabinet having a housing [202], a fluorescent light [380], a translucent diffuser cover [402] and mounting openings [205a, 205b] (abstract, figures 10-13, column 5, lines 54-67 and column 6, lines 1-5).

Hed [US 5,301,090] teaches the use of array of LEDs (abstract).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The applicant recites "*the present application, ..., disclose the use of an optical assembly, not a light diffuser...The light diffuser of Hed is fixed and is comprised of two separate plates, which differ from the optical assembly of the present invention,...*".

The examiner use Hed reference in the combination of Blackman to prove to the applicant that using an array of LEDs as a light source is unpatentable since it is not novelty. The applicant argues with the examiner and convinces the examiner to believe the significant patentability of the present invention by pointing out the light diffuser of Hed and comparing the light diffuser with the optical assembly, which is not clearly defined.

Claims 15, 22-14, 27 and 28, the applicant states in the amended claim 15 and recites that "*this feature is neither disclosed nor suggested by the references cited by examiner*". Blackman teaches the switching to battery power when the AC power is failure (column 5, lines 26-40).

Claims 2-7 and 16-21, the applicant recites "*in fact, Hipp teaches away from the present invention*". Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Claims 11-12 and 25-26, the applicant amended the claims. However, the amendment has not clearly point out the patentable novelty and has been not corrected as the examiner stated in the previous office action.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Q. Truong whose telephone number is (703) 308-6452. The examiner can normally be reached on Monday-Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (703) 035-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7725 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

Bao Q. Truong
Examiner
Art Unit 2875

BQT
March 20, 2002



Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800